

**REMARKS**

At the time of the Office Action dated January 25, 2007, claims 1-8 and 17-19 were pending in this application. Applicants acknowledge, with appreciation, the Examiner's indication that claim 7 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

In this Amendment, claim 1 has been amended and claim 17 cancelled. Care has been exercised to avoid the introduction of new matter. Specifically, claim 1 has been amended to include the limitations recited in claim 17.

Now, claims 1-8, 18, and 19 are active in this application, of which claim 1 is a solo independent claim.

**Claim Rejections**

Claims 1-6 and 19 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Bickham et al.; claim 8 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Bickham further in view of Sasaoka et al.; and claim 18 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Bickham in view of Kato et al. As indicated above, claim 1 is a solo independent claim and has been amended to include the limitations recited in claim 17. Accordingly, the above rejections have been rendered moot by the amendment of claim 17. Applicants address the rejection of claim 17 under 35 U.S.C. 103(a) as being unpatentable over Bickham in view of Kato et al.

In the statement of the rejection regarding claim 17, the Examiner admitted that Bickham does not teach expressly the cladding doped with fluorine. However, the Examiner asserted that Kato et al. teaches a fiber having a fluorine-doped cladding. On that basis, the Examiner

concluded that it would have been obvious to modify Bickham's optical fiber based on the teachings of Kato et al. to arrive at the claimed invention. The Examiner's asserted motivation is to enhance refractive index differences between layers.

This rejection is respectfully traversed because there is no motivation to modify Bickham's optical fiber to arrive at the claimed invention, i.e, an optical fiber in which "said cladding region is doped with fluorine," as recited in claim 1.

Applicants emphasize that Bickham teaches away from the claimed invention. The reference especially teaches, "Preferably, the cladding 14 of the optical fiber disclosed herein is pure or substantially pure silica," and "More preferably, the cladding contains no germania or fluorine dopants therein" (paragraph [0095] of Bickham) (emphasis added). In contrast, claim 1 recites, "said cladding region is doped with fluorine." This teaching away from the claimed invention by the allegedly teaching reference constitutes potent evidence of nonobviousness. *See, Tec Air, Inc. v. Denso Mfg. Michigan, Inc.*, 192 F.3d 1353, 52 USPQ2d 1294 (Fed. Cir. 1999); *In re Bell*, 991 F.2d 781, 26 USPQ2d 1529 (Fed. Cir. 1993); *In re Hedges*, 783 F.2d 1038, 228 USPQ 685 (Fed. Cir. 1986); *W. L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983); *In re Marshall*, 578 F.2d 301, 198 USPQ 344 (CCPA 1978).

Furthermore, Applicants note that Bickham teaches an optical fiber having a specific structure and the achieving of a low loss in Bickham's structure is difficult.

Based on the above, Applicants submit that there is no motivation to modify Bickham's optical fiber based on the teachings of Kato et al. to arrive at the claimed invention.

Accordingly, Applicants submit that the Examiner has not established a *prima facie* basis to deny patentability to the claimed invention for lack of the requisite realistic motivation. Applicants,

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therefore, respectfully solicit withdrawal of the rejection of claims 1-8, 18, and 19 and favorable consideration thereof.

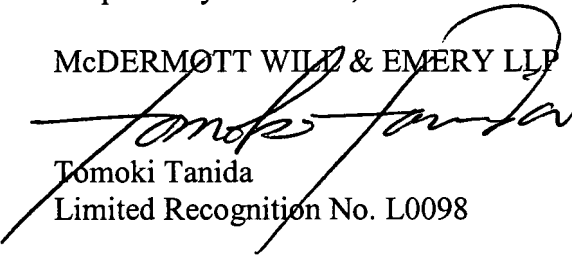
**Conclusion**

It should, therefore, be apparent that the imposed rejections have been overcome and that all pending claims are in condition for immediate allowance. Favorable consideration is, therefore, respectfully solicited.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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